

Serial No. 09/885,792
Art Unit: 2812

13. ~~(Amended) A heterojunction bipolar transistor, comprising:~~
a collector region;
a SiGe base region;
an emitter stack overlying said collection region, said emitter stack including an emitter opening filled with T-shaped polysilicon, said T-shaped polysilicon overlying nitride regions included in said stack; and
one and another extrinsic base regions arranged on respective sides of said emitter stack, said extrinsic base regions being aligned with said emitter polysilicon region but not being directly aligned with said emitter opening.

15. ~~(Amended) The transistor of claim 13, wherein said one of said extrinsic base regions is longer than said another of said extrinsic base regions, and wherein a base contact is formed on the longer extrinsic base region.~~

REMARKS

Applicant amended Figs. 1a - 1j to label as PRIOR ART. A separate letter is attached.

Applicant amended claims 13 and 15 to address the Examiner's rejection under 35 USC 112.

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35 USC 102/103

To the extent that any art rejection continues to be applied against claims 13-16 reconsideration is respectfully requested.

Applicant's invention (claims 13-16, as amended) includes "an emitter opening filled with T-shaped polysilicon," among other elements.

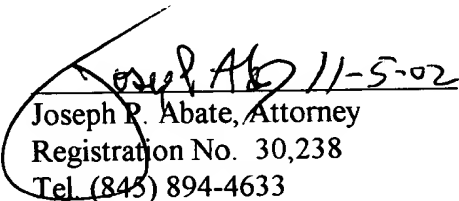
Contrary to Applicant's invention, the emitter 11 of '717 is of single-crystal form at least near the interface with the base in the emitter window (col. 6, lines 60-67). Thus, the emitter of '717 is not "filled with T-shaped polysilicon" as in Applicant's invention (claim 13).

Entry of this Amendment, and passage to issue are requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. **This appendix is captioned "Version with Markings to Show Changes Made".**

Respectfully submitted,
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Attachment: Appendix - Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend claims 13 and 15 as follows:

13. (Amended) A heterojunction bipolar transistor, comprising:
a collector region;
a SiGe base region;
an emitter stack overlying said collection region, said emitter stack including an emitter opening filled with T-shaped polysilicon, said T-shaped polysilicon overlying nitride regions included in said stack; and
one and another extrinsic base regions arranged on respective sides of said emitter stack, said extrinsic base regions being aligned with said emitter polysilicon region but not being directly aligned with said emitter opening.
15. (Amended) The transistor of claim 13, wherein said one of said extrinsic base regions is longer than said another of said extrinsic base regions, and wherein a base contact is formed on the longer extrinsic base region.